

2008 CITY of FREDERICKSBURG WATER QUALITY RESULTS

I. Lead and Copper Substances:

Substance	Units of Measurement	Action Level	MCLG	Results of samples for the 90th Percentile Value	Action Level Exceedance (Y/N)	Sampling Year	# of Sampling Sites Exceeding Action Level	Typical Source
Lead	ppb	15	0	3	NO	2007	one (1)	Corrosion of household plumbing systems, erosion of natural deposits
Copper	ppm	1.3	1.3	0.15	NO	2007	NONE	Corrosion of household plumbing systems, erosion of natural deposits, leaching from wood preservatives

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than other homes in the community as a result of materials used in your home's plumbing. IF you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (800-426-4791).

II. Turbidity

Substance	Treatment Technique Limits	Level Detected	Violation (Y/N)	Sampling Year	Typical Source
Turbidity	1. 1 NTU maximum 2. <0.3 NTU 95% of the time	1. highest single measurement =0.17 2. lowest monthly percentage = 100%	NO	2008	Soil runoff

III. Total Trihalomethanes (TTHMs)

Substance	Units of Measurement	MCLG	MCL	Level Detected	Violation (Y/N)	Range of detection at Sampling Points	Sampling Year	Typical Source
TTHMs	ppb	0	80	29	NO	14 - 46	2008	By-product of drinking water chlorination
HAA5s	ppb	N/A	60	15	NO	1 - 42	2008	By-product of drinking water disinfection

Some people who drink water containing Trihalomethanes (TTHMs) in excess of the MCL over many years could experience problems with their liver, kidneys, or central nervous system and may have an increased risk of getting cancer.

Some people who drink water containing Haloacetic Acids (HAA5's) in excess of the MCL over many years may have an increased risk of getting cancer.

IV. Other Regulated Substances

Substance	Units of Measurement	MCLG	MCL	Level Detected	Violation (Y/N)	Range of detection at Sampling Points		Sampling Year	Typical Source
Fluoride	ppm	4	4	1.19	NO	LOW	HIGH	2008	Erosion of natural deposits, water additive which promotes strong teeth, discharge from fertilizer and aluminum factories
						0.97	1.19		
Nitrate	ppm	10	10	0.16	NO	0.16	0.08	2008	Runoff from fertilizer use, leaching from septic tanks, sewage, and erosion of natural deposits
Total Organic Carbon	ppm	N/A	TT	1.09	NO	0.69	1.39	2008	Naturally present in environment
Chloramines	ppm	4	4	1.09	NO	0.69	1.39	2008	Water additive used to control microbes

We regularly monitor for various substances in the water supply to meet all regulatory requirements. The tables list only those substances that had some level of detection. Many other substances have been analyzed but were not present or were below the detection limits of the lab equipment.

Much of our water quality data is from testing done in 2007. However, the state allows us to monitor for some substances less than once per year because the concentrations of these substances do not change frequently. Even though some of our data may be more than one year old, it is accurate.

Maximum Contaminant Level's are set at very stringent levels by the U.S. Environmental Protection Agency. In developing the standards EPA assumes that the average adult drinks 2 liters of water each day throughout a 70-year life span. EPA generally sets MCLs at levels that will result in no adverse health effects for some substances or a one-in-ten-thousand to one-in-a-million chance of having the described health effect for other substances.

VIOLATION INFORMATION: The Fredericksburg Water Distribution System did not have any violations for contaminants during the year. Also, we are pleased to report to you that there were no detection of total coliforms or e-coli in the monthly samples collected during calendar year 2008.

This Drinking Water Quality report was prepared by: J. W. Roberts, Superintendent of Public Works

**Next Sample Collection for lead and copper
is due between June and September 2010**